

ABSTRACT OF THE DISCLOSURE

An Improved Collet Assembly and Manufacturing Process is disclosed. Also disclosed is an improved collet that includes a spindle, a center portion comprising several tabs and a collar. The disclosed collet is manufactured from a single piece of stock, and as such, the tabs are formed from this unitary piece. The disclosed collet is inserted into a collet housing that is further defined by a bore at its center. The preferred collet housing bore is further defined by a sloped portion that cooperates with the tabs formed on the collet to restrain a burr shaft from rotational or axial movement. The collet assembly of the present invention provides improved balance and therefore wear properties over previous collet assemblies. In particular, the disclosed collet assembly is well-suited for application inside a canister assembly of an air-powered dental tool handpiece.